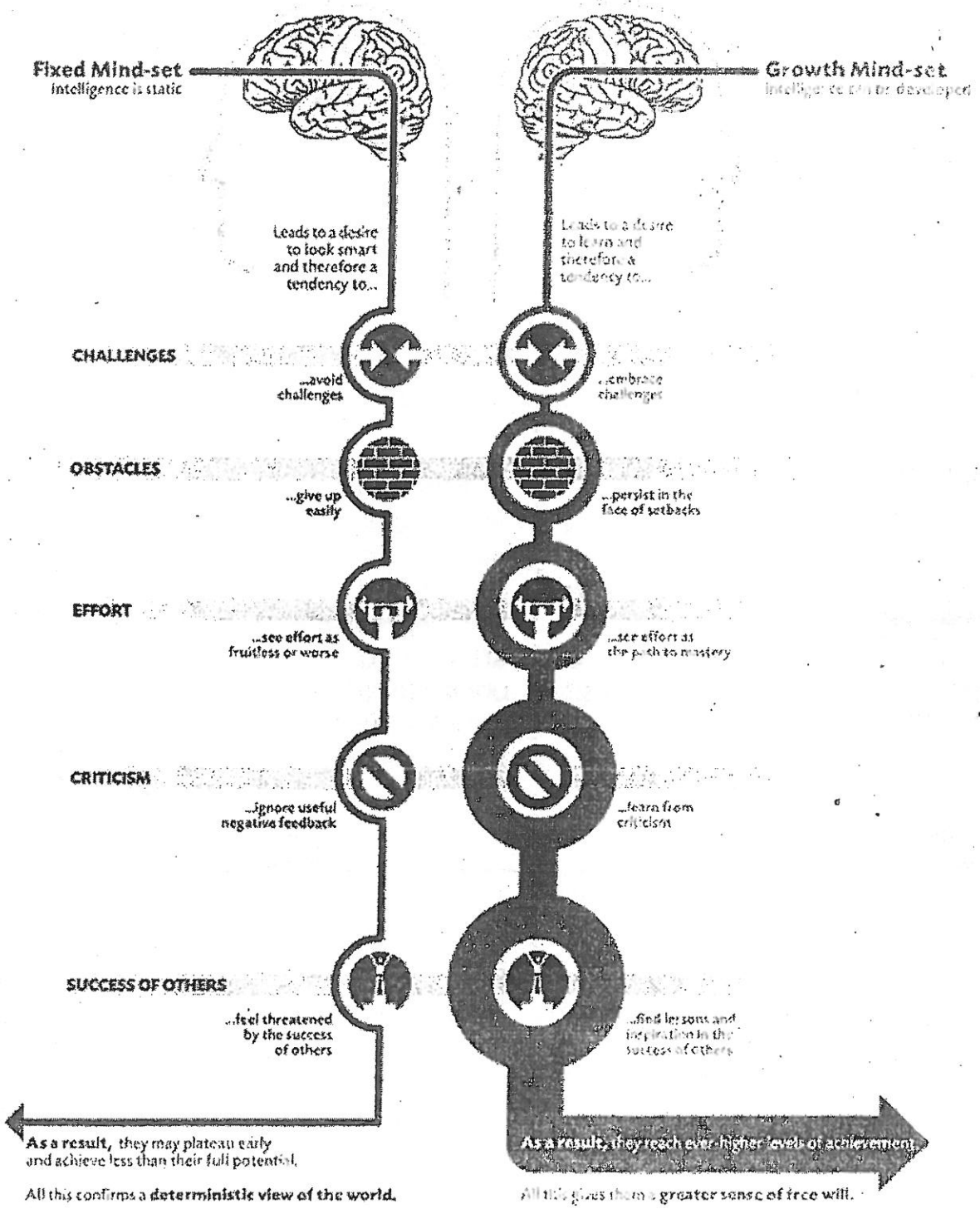
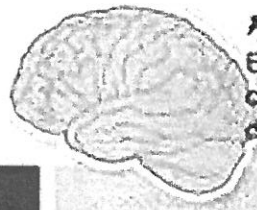


GRAPHIC BY NIGEL HOLMES

Changing Our Mindset

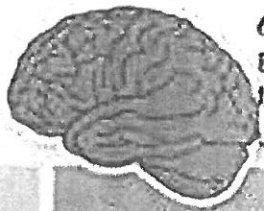
Carol Dweck, world-renowned Stanford University psychologist, talks about the power of our mindset or our beliefs (especially around challenge). We can either have a Fixed Mindset where we let failure (or even success) define who we are, or a Growth Mindset where we see setbacks as opportunities to grow and improve ourselves. Just like how we learned how to walk... there are many stumbles along the way, but to reach our potential and live the life we desire, it takes practice and perseverance. We always have a choice about which view we adopt for ourselves... and it's never too late to change. What's your view?

It's up to you!



FIXED MINDSET

Belief that my intelligence, personality and character are carved in stone; my potential is determined at birth

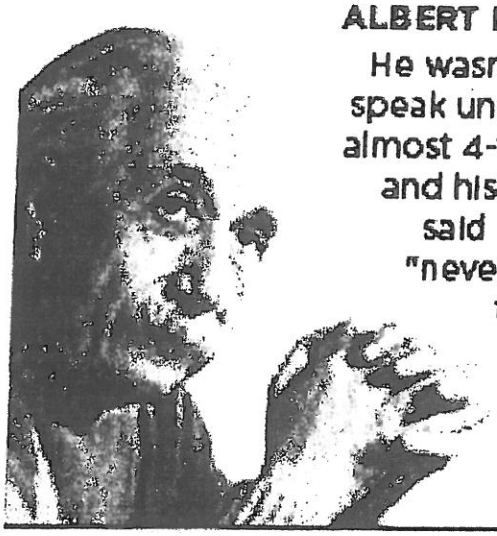


GROWTH MINDSET

Belief that my intelligence, personality and character can be developed! A person's true potential is unknown (and unknowable).

DESIRE	Look smart in every situation and prove myself over and over again. Never fail!!	Stretch myself, take risks and learn. Bring on the challenges!
EVALUATION OF SITUATIONS	Will I succeed or fail? Will I look smart or dumb?	Will this allow me to grow? Will this help me overcome some of my challenges?
DEALING WITH SETBACKS	"I'm a failure" (identity) "I'm an idiot"	"I failed" (action) "I'll try harder next time"
CHALLENGES	Avoid challenges, get defensive or give up easily.	Embrace challenges, persist in the face of setbacks.
EFFORT	Why bother? It's not going to change anything.	Growth and learning require effort.
CRITICISM	Ignore constructive criticism.	Learn from criticism. How can I improve?
SUCCESS OF OTHERS	Feel threatened by the success of others. If you succeed, then I fail.	Finds lessons & inspiration in other people's success.
RESULT...	Plateau early, achieve less than my full potential.	Reach ever-higher levels of achievement.

FAMOUS FAILURES

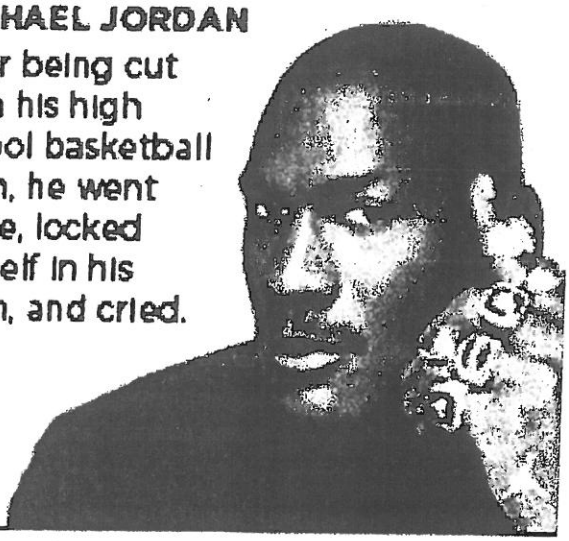


ALBERT EINSTEIN

He wasn't able to speak until he was almost 4-years-old and his teachers said he would "never amount to much"

MICHAEL JORDAN

After being cut from his high school basketball team, he went home, locked himself in his room, and cried.

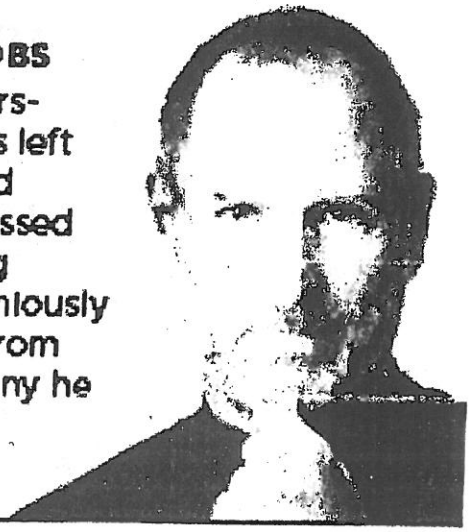


WALT DISNEY

Fired from a newspaper for "lacking imagination" and "having no original ideas."

STEVE JOBS

At 30-years-old he was left devastated and depressed after being unceremoniously removed from the company he started.



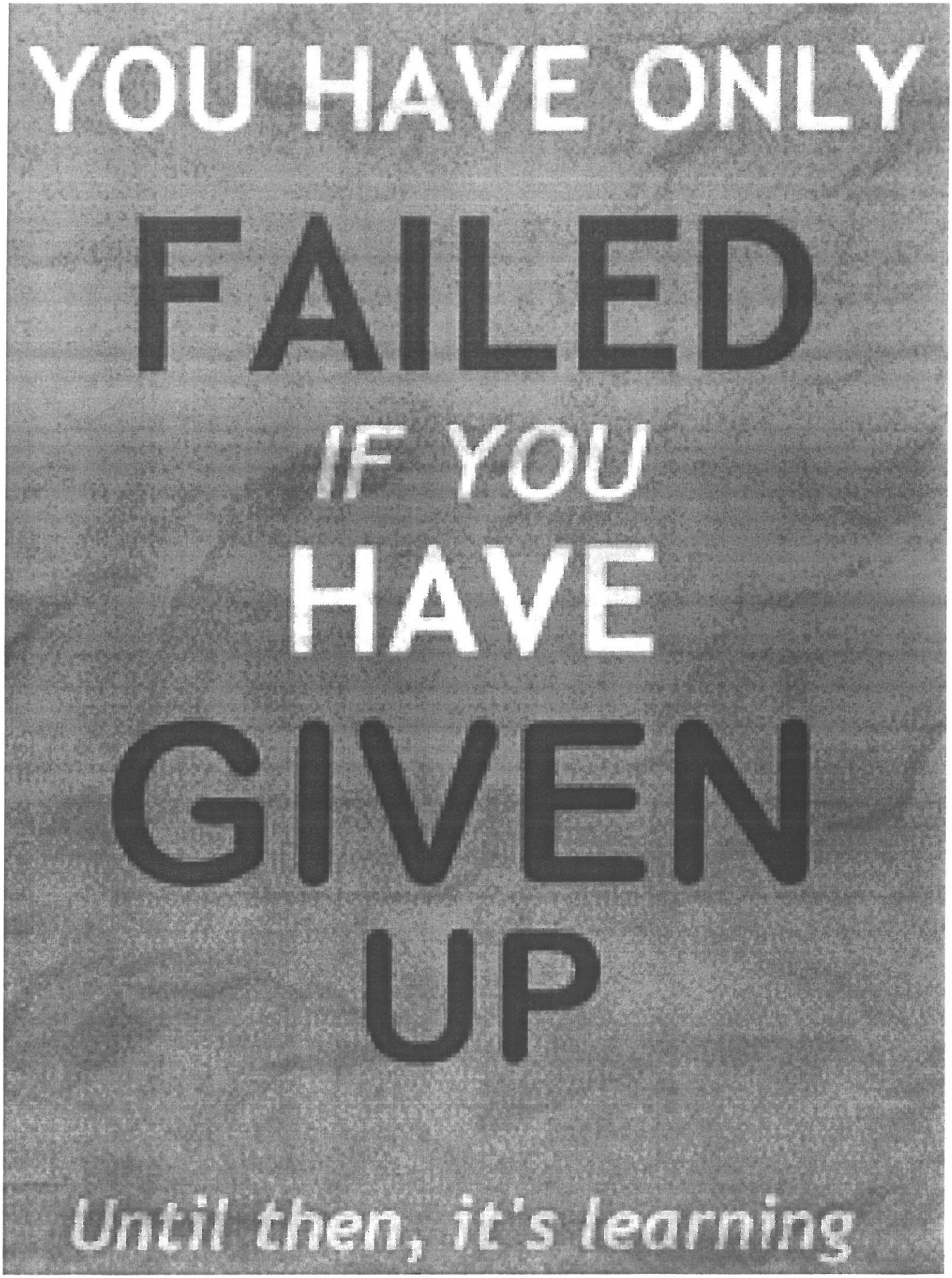
OPRAH WINFREY

Was demoted from her job as a news anchor because she "wasn't fit for television."

THE BEATLES

Rejected by Decca Recording Studios, who said "We don't like their sound—they have no future in show business."

IF YOU'VE NEVER FAILED,
YOU'VE NEVER TRIED ANYTHING NEW


YOU HAVE ONLY
FAILED
IF YOU
HAVE
GIVEN
UP
Until then, it's learning

MATHEMATICAL PRACTICES

Students:	Initial	Intermediate	Advanced
Make Sense of Problems	Explain their thought processes in solving a problem ONE way.	Explain their thought processes in solving a problem and representing it in SEVERAL ways.	Discuss, explain, and demonstrate solving a problem with MULTIPLE representations and in MULTIPLE ways
Persevere in solving problems	Stay with a challenging problem for more than one attempt.	Try SEVERAL approaches in finding a solution, and only seek hints if stuck.	Struggle with various attempts over time, and learn from previous solution attempts.
Reason abstractly and quantitatively	Reason with models or pictures to solve problems.	Translate situations into symbols for solving problems.	Convert situations into symbols to appropriately solve problems as well as convert symbols into meaningful situations.
Construct viable arguments	Explain their thinking for the solution they found.	Explain their own thinking and the thinking of others with accurate vocabulary.	Justify and explain, with accurate language and vocabulary, WHY their solution is correct.
Critique the reasoning of others	Understand and discuss other ideas and approaches.	Explain other students' solutions and identify strengths and weaknesses of the solution.	Compare and contrast various solution strategies and explain the reasoning of others.
Model with mathematics.	Use models to represent and solve a problem, and translate the solution to mathematical symbols.	Use models and symbols to represent and solve a problem, and accurately explain the solution representation.	Use a variety of models, symbolic representations, and technology tools to demonstrate a solution to a problem.

MATHEMATICAL PRACTICES

Students:	**Initial**	**Intermediate**	**Advanced**
Use appropriate tools strategically	Use the appropriate tool to find a solution.	Select from a variety of tools the ones that can be used to solve a problem, and explain their reasoning for the selection.	Combine various tools, including technology, explore and solve a problem as well as justify their tool selection and problem solution.
Attend to precision	Communicate reasoning and solution to others.	Incorporate appropriate vocabulary and symbols in solutions to others.	Use appropriate symbols, vocabulary, and labeling to effectively communicate and exchange ideas.
Look for and make use of structure	Look for structure within mathematics to help solve problems efficiently.	Compose and decompose number situations and relationships through observed patterns in order to simplify solutions.	See complex and complicated mathematical expressions as component parts.
Look for and express regularity in repeated reasoning	Look for obvious patterns, and use if/then reasoning strategies for obvious patterns.	Find and explain subtle patterns.	Discover deep, underlying relationships.